

U.S. Department of Transportation

Research and Special Programs Administration

DOT-E 9497 (EXTENSION) FIRST REVISION August 3, 1988

400 Seventh Street, S.W. Washington, D.C. 20590

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 9497 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to March 31, 1995. This change is effective from the issue date of this extension. All other terms of the exemption remain unchanged.

This extension applies only to party(ies) listed below based on the application(s) received in accordance with 49 CFR 107.105. This extension constitutes a necessary part of this exemption and must be attached to it.

Associate Administrator
for Rezerdous Materials Safety

MAY | 4 1923

(DATE)

Dist: FHWA FRA FAA

EXEMPTION HOLDER

APPLICATION DATE

Scott Speciality Gases, Inc. Plumsteadville, PA

February 26, 1993

Expired - Not Active





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Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

DOT-E 9497 (FIRST REVISION)

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- 1. Amtrol, Inc., West Warwick, Rhode Island Is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to manufacture, mark, and sell the packaging described in paragraph 7 below for use in the transportation of certain liquefied compressed gases described in paragraph 3 below in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the use of non-DOT Specification cylinders for the transportation of carbon dioxide, and provides no relief from any regulation other than as specifically stated.
- 2. <u>BASIS</u>. This exemption is based on Amtrol, Inc.'s application dated May 26, 1988 submitted in accordance with 49 CFR 107.105 and the public proceeding thereon.
- 3. <u>HAZARDOUS MATERIALS (Descriptor and class)</u>. Carbon dioxide, classed as a nonflammable gas.
- 4. PROPER SHIPPING NAME (49 CFR 172.101). Carbon dioxide.
- 5. REGULATION AFFECTED. 49 CFR 173.302(a)(4), 175.3.
- 6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, rail freight and cargo aircraft only.

7. SAFETY CONTROL MEASURES.

a. Packagings prescribed are welded, nonrefiliable, non-DOT Specification steel cylinders in accordance with Pressure Pak, Inc.'s drawing 32084, dated March 20, 1984, on file with the Office of Hazardous Materials Transportation (OHMT) and in compliance with DOT Specification 39 (§178.65) except as follows:

\$178.65-2(b) - Maximum size may not exceed 25 cu. in.

\$178.65-2(c) - Marked service pressure may not exceed 85% of the test pressure. Maximum service pressure may not exceed 2100 psig.

\$178.65-3 - Independent Inspector's agent must be approved in writing by the Director, Office of Hazardous Materials Transportation.

\$178.65-4(c)(2) - Independent inspector (per \$173.300a) must verify proper heat treatment after welding and prior to test.

\$178.65-5(a)(1) - The steel analysis must conform to that shown in \$178.44-5 (Specification 3HT).

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§178.65-6

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(e) (added) Welds to be 100 percent X-rayed.

\$178.65-7(a) - The minimum wall thickness must be such that the wall stress at test pressure does not exceed either of the following:

1. The yield strength of the material of the finished cylinder wall.

2. 110,000 psi.

§178.65-11(b)(1) - A failure occurs at a gage pressure less than 2.36 times the service pressure.

\$178.65-12(a)(4) - Cylinders must not crack when flattened so their outer surfaces are not more than ten times wall thickness apart.

\$178.65-14(b)(1) - Cylinders may not be marked "DOT-39" but instead, must be marked "DOT-E 9497."

b. Cylinders must be shipped in strong outside packagings in accordance with \$173.301(k). Package must be capable of withstanding a twelve foot drop onto solid concrete without damage to the pressure vessel or leakage of gas.

8. SPECIAL PROVISIONS.

- a. Shippers may use the packaging(s) covered by this exemption pursuant to the provisions of 49 CFR 173.22a.
- b. A copy of this exemption must be carried aboard each aircraft used to transport packages covered by this exemption.
- c. Cylinders are authorized only for use as equipment components of military systems.

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- 9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to the OHMT as soon as practicable.
- 10. EXPIRATION DATE. February 28, 1990.

Issued at Washington, D.C.

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(DATE)

Office of Hazardous Materials Transportation

Address all inquiries to: Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Branch.

Dist: FAA, FHWA, FRA